

AMPHIPHILIC NaY ZEOLITE PARTICLES LOADED WITH NIOBIC ACID: MATERIALS WITH APPLICATIONS FOR CATALYSIS IN IMMISCIBLE LIQUID- LIQUID SYSTEM

Hadi Nura, Shigeru Ikeda^b and Bunsho Ohtani^b

Ibnu Sina Institute for Fundamental Science Studies, Universiti Teknologi Malaysia, 81310

UTM Skudai, Johor, Malaysia

Catalysis Research Center, Hokkaido University, Sapporo 060-0811, Japan

Abstract

The catalytic potential of catalysts for acid-catalyzed reactions has been demonstrated by NaY zeolite loaded with alkylsilane-covered niobic acid in the liquid phase hydration of 1,2-epoxyoctane with water. The catalytic activity of the catalysts was correlated to the amphiphilic character of the solid catalyst particles.